PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new traffic control signal at the intersection of MD 63 and French Lane in Washington County, Maryland. MD 63 is considered to run in a North/South direction.

II. INTERSECTION OPERATION

The intersection is to operate in a NEMA six (6) phase, full-traffic-actuated mode. There will be exclusive/permissive left turn phases for both the north and southbound movements of MD 63. The MD 63 through movements will operate concurrently. The French Lane through movements will operate concurrently.

An eight phase, full-traffic-actuated, solid state digital controller with intersection monitor and harness, battery back-up, and two 4-channel rack mounted time delay output loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

CONTACT LIST

The contact persons for District #6 are as follows:

Mr. Fred Crozier
District Engineer
301-729-8400

Mr. George Small
Assistant District Engineer - Traffic
301-729-8400

Mr. Larry Humbertson
Assistant District Engineer - Utility
301-729-8400

Mr. George Frankenberry
Asistant District Engineer - Maintenance
301-729-8400

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

The Power Company Representative is:
Allegany Power
Mr. Martin Bratcher
800 Cabin Hill Dr.
Greensburg, PA 15601
724-838-6326

EQUIPMENT LIST

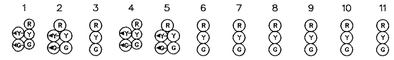
A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
2	EA	818	27 ft. steel twin mast arm pole with 50 ft. and 60 ft. mast arms [Note: 2 in. x 90 in. anchor bolts].
1	EA	816	Standard S.H.A. traffic signal controller, base mounted cabinet, and two 4-channel rack mounted loop detector amplifiers [Note: Controller and cabinet shall be supplied by Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650].
7	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in., one-way, five section (R,Y,YA,G,GA) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	814	12 in./8 in., one-way, five section (R,Y,YA,G,GA) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
2	EA	813	16 in. x Var. D-3(1) (Dual Faced) sign with mast arm mounting hardware.
1	EA	813	30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.
2	EA	813	36 in. x 42 in. R 10-12 sign with mast arm mounting hardware.
1	EA	813	36 in. x 75 in. "Shield Assembly" sign for pole mounting.
1	EA	813	72 in. x 24 in. M 95-1 sign with mast arm mounting hardware.
2	EA	813	48 in. x 48 in. W 3-3 "NEW" sign for ground mounting.
2	EA	806	15 ft. luminaire arm.
2	EA	806	250 W H.P.S. lamp and luminaire.
1	EA	---	Micro-loop probe (set of 3) with 500 ft. lead-in cable.

B. Equipment to be furnished and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

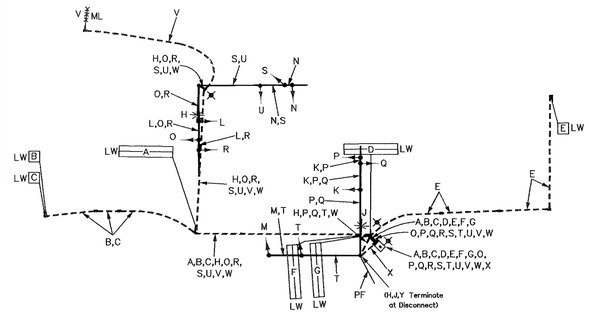
Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
3	CY	205	Test pit excavation.
11	EA	811	Handhole.
685	LF	815	Sawcut for signal loop detector.
2440	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
1685	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
310	LF	810	2-conductor electrical tray cable (No. 12 A.W.G.).
120	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
1400	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
50	LF	810	3-wire (No. 4 A.W.G.) electrical cable.
20	LF	810	3-wire (No. 8 A.W.G.) electrical cable.
220	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
40	LF	805	1 in. liquid tight flexible non-metalic conduit for loop detector sleeve.
110	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
65	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
765	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
65	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
10	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
180	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - slotted in roadway.
10.55	CY	801	Concrete foundation for traffic signal equipment.
3	EA	804	Ground rod - ¾ in. diameter x 10 ft. length.
1	EA	807	Control and distribution equipment (120/240 V, one phase, three wire system) for a type B-14 overhead electrical service.
135	EA	556	24 in. wide HAPPTPM - white for stop line.
82	LF	812	4 in. x 6 in. wood sign support.
Lump Sum	LS	---	As-built for MD-S.H.A. [on CADD].

Phase Chart



	1	2	3	4	5	6	7	8	9	10	11	
Phase 1 & 5	R, G	R, G	R	R, G	R, G	R	R	R	R	R	R	
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6												
Phase 1 & 6	G, G	G, G	G	R	R	R	R	R	R	R	R	
1 Change	G, Y	G, Y	G	R	R	R	R	R	R	R	R	
Phase 2 & 5	R	R	R	G, G	G, G	G	R	R	R	R	R	
5 Change	R	R	R	G, Y	G, Y	G	R	R	R	R	R	
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G	G	
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y	Y	
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	

Wiring Diagram



A, B, C, D — E, F, G — 2-Conductor Cable (Aluminum Shielded)

H, J — 2-Conductor Tray Cable (No. 12 A.W.G.)

K, L, M, N — 5-Conductor Electrical Cable (No. 14 A.W.G.)

O, P, O, R — S, T, U — 7-Conductor Electrical Cable (No. 14 A.W.G.)

V — Micro-loop probe lead-in

W — Bare Copper Ground Wire (No. 6 A.W.G.)

X — 3-Wire (No. 4 A.W.G.) for Traffic Signal Electrical Service

Y — 3-Wire (No. 8 A.W.G.) for Street Lighting Electrical Service

LW — Loop Detector Wire (No. 14 A.W.G.) in Flexible Tubing

ML — Micro-loop Detector Wire (No. 14 A.W.G.) in Flexible Tubing

PF — Proposed Overhead Electrical Service By Allegany Power (To be determined in the field)

Proposed Grounding Rod

The Traffic Group

The Traffic Group, Inc.
Suite 600
40 W. Chesapeake Avenue
Towson, Maryland 21204
410-583-8405
1-800-583-8411
Fax 410-321-8458
Job. No. 990113
SIGPLAN.DGN

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(General Information)

MD 63 at French Lane

DATE: October 15, 1999 — LOG MILE # 21063010.42

DRAWN BY: J.E.S.	F.A.P. NO. N/A		PLAN SHEET NO.:	SHEET NO.
CHK. BY: J.J.D.	S.H.A. NO. BW996M82		3942-GI	2 of 2
SCALE: N/A	COUNTY: Washington			

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